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CAO, DIEM K				
ART UNIT		PAPER NUMBER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATDOCTC@fr.com

Office Action Summary

Application No.

10/727,104

Applicant(s)

ESCHENROEDER ET AL.

Examiner

DIEM K. CAO

Art Unit

2194

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 August 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 10-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 10-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-5 and 10-26 are pending. Applicant has amended claims 1, 4, 10, 14, 15, 18, 19, 22, canceled claims 6-9 and added new claims 23-26

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/6/2008 has been entered.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 14, 24 and 26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 14 recites the limitation "the agent" in 8. There is insufficient antecedent basis for this limitation in the claim.

Claim 24 recites the limitation "each process data item comprising application data and having been collected by the agents associated with each of the component", which is already cited in the claim 1.

Claim 26 recites the limitation "each process data item comprising application data" which is already cited in claim 10.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-5, 10-22, 24, 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bendiksen et al (U.S. 2006/0085798 A1) in view of Kaler et al (U.S. 6,671,830 B2).

As to claim 1, Bendiksen teaches a computer program product, tangibly embodied in a machine-readable storage device, the computer program product comprising instructions operable to cause data processing apparatus to perform operations comprising (page 1, paragraph 2):

receiving a plurality of process data items associated with a plurality of process instances that are executed using a plurality of components operating in a distributed computer system (the analyzer 10 collects events originated from one or more particular sensors 14; page 5, paragraph 78 and page 3, paragraph 47, and page 9, paragraph 119), each process data item comprising application data and having been collected by agents associated with each of the components (the sensor generates the event, function call parameters to be sent; page 3, paragraphs 53-55 and page 5, paragraphs 82-85, and page 4, paragraph 62, and page 9, paragraph 119);

comparing in accordance with a plurality of predefined rules each received process data item with one or more other received process data items to identify process data corresponding to process instances executed on the distributed computer system (at step 610, the analyzer 10 ... for a next potential matching event; page 6, paragraph 86-92 and page 5, paragraph 81);

grouping into a first group a plurality of process data items corresponding to a first process instance (Assuming that the UserIdentifier ... the next potential matching event; page 6, paragraph 92 and the processes that he analyzer 10 users to group event ... and/or host; page 7, paragraph 107), the first process instance being a single execution of a sequence of related steps carried out in the distributed computer system (Assuming that the UserIdentifier ... the next potential matching event; page 6, paragraph 92 and the processes that he analyzer 10 users to group event ... and/or host; page 7, paragraph 107);

grouping into a second group a plurality of process data times corresponding to a second process instance, the second process instance being a single execution of a second sequence of related steps carried out in the distributed computer system (Assuming that the UserIdentifier ... the next potential matching event; page 6, paragraph 92 and the processes that he analyzer 10 users to group event ... and/or host; page 7, paragraph 107 and Assuming that the UserIdentifier ... the next potential matching event; page 6, paragraph 92 and the processes that he analyzer 10 users to group event ... and/or host; page 7, paragraph 107 and see Fig. 13. Applicant is noted that although the reference does not use “first group” or “second group” or “first process instance” or “second process instance”, the reference teaches multiple groups and multiple process instances, thus meet the claim limitation); and

reconstructing the first and second process instances based on the process data items in the first and second group, respectively (At this time the list of events that make up the UOW can be displayed to the user for analysis; page 8, paragraph 111 and Another view is referred to as dynamic transaction visualization, where transactions are shown; page 9, paragraphs 122-123).

Bendiksen does not teach reconstruction of the first and second process instances begins during execution of the first and second process instances in the distributed computer system. However, Kaler teaches reconstructing the process instance begins during execution of the process instance (col. 31, line 35 – col. 32, line 9).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of Kaler to the system of Bendiksen because Kaler teaches a method for analyzing the performance of a data processing system without modifying or degrading its performance, and during and after execution of the system (abstract).

As to claim 2, Bendiksen teaches modeling a process based on the reconstruction of the first process instance (The graphical presentation ... of transaction problems; page 9, paragraphs 122-123).

As to claim 3, Bendiksen teaches monitoring the first process instance based on the process data items in the first group (At this time the list of events that make up the UOW can be displayed to the user for analysis; page 8, paragraph 111 and In some cases the amount of

captured data may be make dynamic, e.g., as a function of the current environment or operating state of the system/processor being monitored; page 3, paragraph 56).

As to claim 4, Bendiksen teaches wherein the process data items are collected by the agents upon the occurrence of a predetermined condition (these rules determine the conditions which trigger event generation/reporting, as well as amount of information to be collected, the sensor 14 determines if any of the existing filter rules match the current program state ... generate the event; page 3, paragraphs 53-54), and wherein monitoring the first process instance comprises modifying the predetermined condition (The amount of information ... rule specification; page 3, paragraph 55, and In some cases the amount of captured data may be make dynamic, e.g., as a function of the current environment or operating state of the system/processor being monitored; page 3, paragraph 56).

As to claim 5, Bendiksen teaches wherein the process data items have a first type (standard or technology neutral event information 318; page 4, paragraph 60), and wherein monitoring the first process instance further comprises specifying a second type of process data item for the agent to collect (technology specific event information 320; page 4, paragraphs 60-61).

As to claim 10, Bendiksen teaches a computer product, tangibly embodied in a machine-readable storage device, the computer program product comprising instructions operable to cause data processing apparatus to perform operations comprising (page 1, paragraph 2):

receiving a specification of a predetermined condition (each configuration message ... rules ... event data package; page 3, paragraphs 53 and 55),

upon the occurrence of the predetermined condition (the sensor 14 determines ... if there is a matching event; page 3, paragraph 54), collecting a plurality of process data items associated with components operating in a distributed computer system (the sensor 14 generates the event, thereby capturing the state of the triggering function call; page 3, paragraphs 54 and 47), each process data item comprising application data (The amount of information ... be captured and save; page 3, paragraph 55 and pages 5-6, paragraphs 82-85); and

transferring the process data items to a central system (The sensor 14 ... with the analyzer 12; page 3, paragraph 51) operable to discover (at step 910, the user specifies an event(e) of interest ...for analysis; pages 7-8, paragraph 111) and reconstruct first and second process instances based on common application data found in the process data items (At this time the list of events that make up the UOW can be displayed to the user for analysis; page 8, paragraph 111 and Another view is referred to as dynamic transaction visualization, where transactions are shown; page 9, paragraphs 122-123), the process instances each being a single execution of a sequence of related steps carried out in the distributed computer system (units of work, transaction; page 7, paragraphs 107-110 and process the mortgage requests, credit check application, tax assessment application, etc; page 8, paragraph 114). Applicant is noted that

although the reference does not use “first group” or “second group” or “first process instance” or “second process instance”, the reference teaches multiple groups and multiple process instances, thus meet the claim limitation.

Bendiksen does not teach reconstruction of the first and second process instances begins during execution of the first and second process instances in the distributed computer system. However, Kaler teaches reconstructing the process instance begins during execution of the process instance (col. 31, line 35 – col. 32, line 9).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of Kaler to the system of Bendiksen because Kaler teaches a method for analyzing the performance of a data processing system without modifying or degrading its performance, and during and after execution of the system (abstract).

As to claim 11, Bendiksen teaches wherein the operating of collecting the process data items occurs without modifying the component (this process is conducted in a non-intrusive manner and does not require any additional recompilation or relinking of the user application; page 3, paragraph 48).

As to claim 12, Bendiksen teaches receiving a specification of a second predetermined condition (This management function ... messages, removing expired messages, and retrieving newly arrived messages, each configuration message contains a set of data collection filter rules; page 3, paragraph 53), and upon the occurrence of the second predetermined condition,

collecting additional process data items associated with the component (the sensor 14 determines .. generates the event; page 3, paragraphs 54-55).

As to claim 13, Bendiksen teaches receiving a specification of a second component (inherent from multiple applications in a business process, each has its own local transaction/event collected by associated agent; page 8, paragraph 114 and page 9, paragraph 119 and This management function ... messages, removing expired messages, and retrieving newly arrived messages, each configuration message contains a set of data collection filter rules; page 3, paragraph 53), upon the occurrence of another predetermined condition, collecting other process data items associated with the second component, and transferring the other process data items to the central system (the sensor 14 determines .. generates the event; page 3, paragraphs 54-55).

As to claim 14, see rejection of claim 1 above. Bendiksen further teaches transferring the process data items from the agent to a central system (The sensor 14 ... with the analyzer 12; page 3, paragraph 51).

As to claim 15, it is the same as product claim of claim 1 except this is a method claim, and is rejected under the same ground of rejection.

As to claims 16-17, see rejections of claims 2-3 above.

As to claim 18, it is the same as product claim of claim 10 except this is a method claim, and is rejected under the same ground of rejection.

As to claim 19, it is the same as product claim of claim 1 except this is an apparatus claim, and is rejected under the same ground of rejection.

As to claims 20-21, see rejections of claims 2-3 above.

As to claim 22, it is the same as product claim of claim 10 except this is system claim, and is rejected under the same ground of rejection.

As to claim 24, Bendiksen teaches receiving process data items associated with the plurality of process instances after execution of the process instances (page. 8, paragraphs 112, 115 and 116), each process data item comprising application data and having been collected by the agents associated with each of the component (the sensor generates the event, function call parameters to be sent; page 3, paragraphs 53-55 and page 5, paragraphs 82-85, and page 4, paragraph 62, and page 9, paragraph 119).

As to claim 26, see rejection of claim 24 above.

7. Claims 23 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bendiksen et al (U.S. 2006/0085798 A1) in view of Kaler et al (U.S. 6,671,830 B2) further in view of Alonso et al. (WISE: Business to Business E-Commerce).

As to claim 23, Bendiksen teaches comparing the first and second process instances to provide a comparison (page 9, paragraphs 119, 122-124), and providing a process context based on the comparison, the process context corresponding to a plurality of possible execution paths (message path relation; page 4, paragraphs 62-63).

Bendiksen does not teach the first and second process instances corresponding to the common process, and the process context corresponding to a plurality of possible execution paths through the common process. However, Alonso teaches the first and second process instances corresponding to the common process (Fig. 1 and section 2.1 Virtual Enterprises), and the process context corresponding to a plurality of possible execution paths through the common process (see Fig. 1)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of Alonso to the system of Bendiksen and Kaler because Alonso teaches a process monitoring that provides accurate measurements of all the characteristics affecting the execution of a process (page 6, section 5 Process Monitoring).

As to claim 25, see rejection of claim 23 above.

Response to Arguments

8. Applicant's arguments with respect to claims 1-5 and 10-26 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DIEM K. CAO whose telephone number is (571)272-3760. The examiner can normally be reached on Monday - Friday, 7:30AM - 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DC
October 10, 2008

/Li B. Zhen/
Primary Examiner, Art Unit 2194